UNIT 1
Past, present and future need of micro-irrigation systems, Role of Govt. for the promotion of micro-irrigation in India, Merits and demerits of micro-irrigation system.

UNIT II
Types and components of micro-irrigation system, Micro-irrigation system- design, installation, and maintenance. Sprinkler irrigation - types, planning factors, uniformity and efficiency, laying pipeline, hydraulic lateral, sub-mains and main line design, pump and power unit selection.

UNIT III
Drip irrigation – potential, automation, crops suitability. Fertigation – Fertilizer application criteria, suitability of fertilizer compounds, fertilizer mixing, injection duration, rate and frequency, capacity of fertilizer tank.

UNIT IV
Quality control in micro-irrigation components, design and maintenance of polyhouse, importance and application of polyhouse.

UNIT V
Prospects of waste land development –hills, semi-arid, coastal areas, water scarce areas, Benefit and Cost analysis.

TEXT BOOKS:

REFERENCE BOOKS: